ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/02 Date Received: 02/07/02

Project: Metro Self Monitor, PO# M67502

Date Extracted: 02/21/02 Date Analyzed: 02/21/02

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

	Sample ID	<u>C</u> 1	<u>nromium</u>	Copper	Nickel	<u>Zinc</u>	
100	Laboratory ID						
	M67502		0.16	0.34	0.12	0.07	
	202039-01						
	Method Blank		<0.05	< 0.05	< 0.05	< 0.05	

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/02 Date Received: 02/07/02

Project: Metro Self Monitor, PO# M67502

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 202039-01 (Duplicate)

	Reporting	Sample	Duplicat	Relative e Percent	Acceptan	.ce
Analyte	Units	Result	Result	Difference	Criteria	1
Chromium	mg/L (ppm)	0.16	0.18	12	0-20	411
Copper	mg/L (ppm)	0.34	0.32	6	0-20	
Nickel	mg/L (ppm)	0.12	0.17	34 a	0-20	
Zinc	mg/L (ppm)	0.07	< 0.05	nm	0-20	

Laboratory Code: 202039-01 (Matrix Spike)

(Administration)	Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	ce RPD
Analyte	Units	Level	Result	MS	MSD) Criteria	(Limit 20)
Chromium	mg/L (ppm)	2	0.16	94	98	80-120	4
Copper	mg/L (ppm)	2	0.34	92	92	80-120	0
Nickel	mg/L (ppm)	4	0.12	93	94	80-120	1
Zinc	mg/L (ppm)	2	0.07	95	98	80-120	3

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recove	ery % Recove	ery Acceptance	e RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Chromium	mg/L (ppm)	2	108	107	80-120	
Copper	mg/L (ppm)	2	104	104	80-120	0
Nickel	mg/L (ppm)	4	106	105	80-120	1
Zinc	mg/L (ppm)	2	107	107	80-120	0

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 28, 2002

DUPLICATE COPY

INVOICE #02ACU0228-4

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M67502 - Results of testing requested by Gerry Thompson for material submitted on February 7, 2002.

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/02 Date Received: 02/07/02

Project: ProjectID

Date Extracted: 02/21/02 Date Analyzed: 02/21/02

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	<u>C</u>	<u>hromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
Laboratory ID					
M67502		0.16	0.34	0.12	0.07
202039-01					
Method Blanl	s aiil Hii	< 0.05	<0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 02/28/02 Date Received: 02/07/02

Project: ProjectID

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 202039-01 (Duplicate)

	Pin Abib.					, N.	Relati	ve	
			Reporting	San	iple	Duplica	te Perce	nt Accept	tance
	Analyte	receipe to the agr	Units	Res	sult	Result	Differe	nce Crite	eria
ij	Chromium		mg/L (ppm)	0.	16	0.18	12	0-2	20
	Copper		mg/L (ppm)	0.	34	0.32	6	0-2	20
	Nickel		mg/L (ppm)	0.	12	0.17	34 a	ı 0-2	20
	Zinc		mg/L (ppm)	0.0)7	< 0.05	nm	0-2	20

Laboratory Code: 202039-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance	e RPD
	Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
(Chromium	mg/L (ppm)	2	0.16	94	98	80-120	4
(Copper	mg/L (ppm)	2	0.34	92	92	80-120	0
1	Vickel	mg/L (ppm)	4	0.12	93	94	80-120	1
7	Zinc	mg/L (ppm)	2	0.07	95	98	80-120	3

Laboratory Code: Laboratory Control Sample

				N			A 1504
	Reporting	Spike	% Recove	ery % Recov	very Acce	ptance	RPD
Analyte	Units	Level	LCS	LCSI	D Cri	teria	(Limit 20)
Chromium	mg/L (ppm)	2	108	107	80	-120	1
Copper	mg/L (ppm)	2	104	104	80	-120	0
Nickel	mg/L (ppm)	4	106	105	80	-120	1
Zinc	mg/L (ppm)	2	107	107	80	-120	0

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 28, 2002

DUPLICATE COPY

INVOICE #02ACU0228-4

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project ProjectID- Results of testing requested by Gerry Thompson for material submitted on February 7, 2002.

FEDERAL TAX ID #91-1287838

2	0203	9		SAMPLE C	CHAIN O	F Ç	US'	TO]	DY				L	6	3I 4	- 1	Чź	2/7/02
Send Report To Elect Company ALASKAN Address 628 S.) CAP	ra we	reks	PROJEC	ERS/signor ET NAME/I	VO.	- State of the sta	m	Ð~	Fon	P	PC			0	T Stan RUS	URNA dard H	ofofAROUND TIME (2 Weeks) s authorized by:
City, State, ZIP <u>SEX</u> Phone# 26-382-83-				45	KS					ANA	LYS	ES R	EQUE	ESTE	0	Disp Retu	ose al rn sa	LE DISPOSAL fter 30 days mples with instructions
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	OR. C. M. 22						Notes
M67502	01	2/02	12:30	Hre	1											_		
								_		_				_				

MG7502 01 34/0 1230 HZD (

Friedman & Bruya, Inc. 3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

		1 1 1 1 1 1		
SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinguished by:	Fraco Thompson	ACW	2/4/02	1:00pm
Received on L	Michael Erdah	Fi Binc	2/7/02	1:15 pm
Relinquished by:				<i> </i>
Received by:				

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 28, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 7, 2002 from your Metro Self Monitor, PO#M67502 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures ACU0228R.DOC

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 4, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the amended results from the testing of material submitted on February 7, 2002 from your Metro Self Monitor, PO# M67502 project. The results were amended to reflect the correct project identification.

We apologize for any inconvenience this may have caused you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, ING.

Michael Erdahl Project Manager

Enclosures ACU0228R.DOC

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

February 28, 2002

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on February 7, 2002 from your Metro Self Monitor, PO# M67502 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures ACU0228R.DOC